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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,618	10/29/2003	Allen A. Aradi	EI-7607	5585

34769 7590 03/23/2006

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/696,618	Applicant(s) ARADI ET AL.	
	Examiner Cephia D. Toomer	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 12-22 and 26-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Dorer (US 4,664,677).

Dorer teaches a fuel composition for internal combustion engines comprising a manganese containing compound and a copper containing compound (see abstract). The disclosure of internal combustion engine encompasses a spark ignited internal combustion engine having a fuel injection system and 6 or more cylinders as set forth in claims 12, 14, 26 and 28, absent evidence to the contrary. The compounds may be inorganic or organic. Examples of the inorganic compounds include manganese oxides, manganese hydroxides, manganese carbonates, copper oxides, copper hydroxides, manganese carbonates, copper oxides, copper hydroxides, and copper carbonates (see col. 1, line 65 through col. 2, lines 1-2). The organic compounds may be salts of

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carboxylic, sulfonic and phosphorus acid (see col. 2, lines 7-17). The fuel compositions have a combined manganese and copper content of about 1-1000 ppm and the fuel may be gasoline (encompasses unleaded) or diesel (see col. 7, lines 13-18, 26-43, Examples VI and VII).

Dorer teaches the limitations of the claims other than the methods of claims 1 and 15. However, the discovery of a previously unappreciated property of a prior art composition does not render the old composition patentably new to the discover. Thus the claiming of a new use, new function or unknown property does not necessarily make the claims unpatentable.

4. Claims 1-3, 6-10, 12-17, 20-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (US 3,179,506).

Henderson teaches a hydrocarbon fuel of gasoline (encompasses unleaded) for use in spark ignition internal combustion engines wherein the fuel comprises methylcyclopentadienyl manganese tricarbonyl (see claim 4). The disclosure of spark ignition internal combustion engines suggest a fuel injection system and 6 cylinder engine as set forth in claims 12, 14, 26 and 28 , absent evidence to the contrary. Henderson teaches that the fuel does not lay down combustion chamber deposits (see col. 2, lines 15-19). The manganese compound is present in the fuel in an amount up to 2 g/gal fuel (see col. 6, lines 26-30).

Henderson teaches the limitations of the claims other than the methods of claims 1 and 15. However, the discovery of a previously unappreciated property of a prior art composition does not render the old composition patentably new to the discover. Thus

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the claiming of a new use, new function or unknown property does not necessarily make the claims unpatentable.

5. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson as applied to claims above, and further in view of Kaneko (US 5,401,280).

Henderson has been discussed above. Henderson fails to teach the sulfur content of the gasoline. However, Kaneko teaches this difference. Kaneko teaches gasoline compositions wherein the maximum sulfur content of the gasoline is 50 ppm or less (see col. 3, lines 15-20).


It would have been obvious to one of ordinary skill in the art to select a gasoline comprising less than 30 ppm sulfur because Kaneko teaches that gasoline should have less than 50 ppm sulfur otherwise the exhaust gas cleaner would malfunction. Also, the greater the amount of sulfur that is present in the fuel the greater the amount of harmful SO_x emissions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cepha D. Toomer
Primary Examiner
Art Unit 1714

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